



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER 923,798	FILING DATE 11/10/86	FIRST NAMED APPLICANT PALMAZ	ATTORNEY DOCKET NO. J 1207005
--------------------------	-------------------------	---------------------------------	----------------------------------

BEN D. TOBOR  
TUDZIN & TOBOR  
ONE ELDRIDGE PLACE  
777 N. ELDRIDGE, SUITE 650  
HOUSTON, TX 77079

EXAMINER	
KARTCHNER, G	
ART UNIT 336	PAPER NUMBER 3

DATE MAILED: 01/28/87

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449       | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474      | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-38 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-38 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Serial No. 923,798

-2-

Art Unit 336

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-3, and 7-11 are rejected under 35 U.S.C. 103 as being unpatentable over Hammerslag.

Hammerslag teaches a method implanting an intraluminal vascular graft which comprises the steps of; disposing a thin-walled tubular graft on a balloon catheter, placing the catheter in the blood vessel, then stretching the graft by inflating the balloon such that the graft remains in place when the balloon is removed. See Hammerslag column 2, lines 39-53. The graft is made of a biologically inert material. Even though Hammerslag's tubular member does not entirely meet the structural description, the method steps are clearly analogous to applicant's method steps.

Claims 13-15, 18-21, 23-27, 29-30 and 33-34 are rejected under 35 U.S.C. 103 as being unpatentable over Didcott.

Serial No. 923,798

-3-

Art Unit 336

Didcott shows a thin-walled tubular dilator which can be used in blood vessels having a wire mesh which is slotted much as applicant's device and which is covered with a resilient material (see page 1, lines 53-73). Didcott's dilator has a first diameter which permits it to enter the blood vessel and a second diameter which cause it to force out upon the interior walls of the vessel. The dilator can also have spikes (see element 16) which would help to hold the dilator in place.

Claims 1-11, 13-15, 17-21, 23-27, 29-30 and 32-38 are rejected under 35 U.S.C. 103 as being unpatentable over Hammerslag et al as applied to claim 1 above, and further in view of Didcott.

It would be obvious to one of ordinary skill in the art to provide Hammerslags thin-walled graft with a wire mesh sleeve as taught by Didcott. Hammerslag teaches at column 2, lines 44-48, that his graft stretches beyond its elastic point when the balloon is inflated, thereby causing it to remain in place against the vessel wall. It would be obvious to provide a wire which would also plastically deform under the same balloon force.

Claims 12, 22 and 28 are rejected under 35 U.S.C. 103 as being unpatentable over Hammerslag et al. in view of Didcott as applied to claim 1 above, and further in view of Walsten.

Walsten teaches the openings through a coated wire tubular prosthesis. It would be obvious to leave openings through the wall of Hammerslag and/or Didcotts device.

165

Serial No. 923,798

-4-

Art Unit 336

Claims 4-6, 9-12, 16 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4-6 and 9-12 are vague and indefinite in that they contain no further method step or limitation of a previously defined method step. Method claims are not further limited merely by defining structure. Claims 16 and 31 are vague and indefinite in that they seem to describe the graft as exerting no force on the vessel wall which it must remain attached to. This is contrary to examiners understanding of the purpose of the prosthesis, e.g., to hold itself in place in the vessel by exerting a force against the vessel wall.

Any inquiry concerning this communication should be directed to G. Kartchner at telephone number 703-557-3131.

*AL*  
G. Kartchner:dg

01/21/87

*C. Fred Rosenbaum*  
C. FRED ROSENBAUM  
S. P. E.  
ART UNIT 336